

Title (en)  
INJECTION DEVICE FOR A DIESEL ENGINE

Publication  
**EP 0284601 A3 19890913 (DE)**

Application  
**EP 88890075 A 19880324**

Priority  
AT 74687 A 19870326

Abstract (en)  
[origin: EP0284601A2] In an injection device for diesel engines, in particular in a pump nozzle (1, 41), in which the fuel is conveyed by a pilot pump (32) into an intake chamber (13, 51) which can be connected to the working chamber (9) of the injection pump piston (3) by way of at least one control hole (8) in the pump piston sleeve (7), the conveying end (i) of the injection pump piston 3 being determined by controlling the fuel through the control hole (8) or control holes into the intake chamber (13, 51), at least one displacement piston (17, 46) carried in a cylinder (21, 47) and driven to produce a reciprocating motion is provided, whose working chamber (23, 49) is always openly connected to the intake chamber (13), the displacement piston (17, 46) reducing its working chamber (23, 49) before the start of pumping (h) by the injection pump piston (3) and enlarging it on or after the completion of pumping (i) by the injection pump piston (3). In this way the fuel pressure in the intake chamber (13) is raised before the start of pumping (h) by the injection pump piston (3) and improves the filling of the working chamber (9) of the latter. When, on completion of pumping (i), the fuel emerges from the working chamber (9) of the injection pump piston (3) through the control holes (8) with great energy into the intake chamber (13, 51), the admission volume of the intake chamber is increased due to the increase in the working chamber (23, 49) of the displacement piston (17, 46), thereby reducing the force of the resulting pressure spray. <IMAGE>

IPC 1-7  
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IPC 8 full level  
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CPC (source: EP US)  
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Citation (search report)  
• [A] GB 507940 A 19390623 - AUSTIN MOTOR CO LTD, et al  
• [A] DE 3215047 A1 19831103 - MASCHF AUGSBURG NUERNBERG AG [DE]  
• [A] US 2592367 A 19520408 - WOOD JR GEORGE B  
• [A] DE 3617786 A1 19861204 - TOYOTA MOTOR CO LTD [JP]  
• [A] FR 2328117 A1 19770513 - STANADYNE INC [US]

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**EP 0284601 A2 19880928**; **EP 0284601 A3 19890913**; **EP 0284601 B1 19920513**; AT E76165 T1 19920515; DE 3870956 D1 19920617

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